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**Robert L Williams\*** ([rwilliams@math.tamu.edu](mailto:rwilliams@math.tamu.edu)), Mathematics, Mail Stop 3368, Texas A&M University, College Station, TX 77843. *Galois groups of Schubert problems via symbolic computation*. Preliminary report.

The number of solutions to problems in the Schubert calculus is known through combinatorics. However, the actual solution set usually possess additional structure revealed through a Galois group. The method of computing Frobenius lifts from prime characteristic is particularly effective for finding information about this structure for Schubert problems. We use this to determine the Galois groups of all 30,000+ Schubert problems involving 4-planes in 9-dimensional space. (Received February 15, 2016)